

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

By way of this Amendment, withdrawn claims 7-11 are cancelled without prejudice or disclaimer, and Claim 22 remains canceled. Claims 1, 24 and 28 are amended and new Claims 29-35 are added. Thus, the claims currently pending in this application are Claims 1-6, 12-21 and 23-35. Claims 4-6 remain withdrawn from consideration as being directed to the non-elected species. Claim 1 is readable on the elected species and is generic to the species encompassed by claims 4-6 and so it is appropriate to maintain dependent Claims 4-6 in this application. Applicants respectfully request that upon allowance of Claim 1, Claims 4-6 be rejoined. Claims 2, 3, 12-21 and 23-35 are also readable on the elected species. Claims 1, 24 and 28 are the only independent claims.

The final Office Action sets forth a rejection of independent Claims 1 and 28 under 35 U.S.C. §102(b) over U.S. Patent No. 6,001,068 to Uchino et al., and also sets forth a rejection of independent Claim 24 under 35 U.S.C. §103(a) over Uchino in view of U.S. Patent No. 5,769,796 to Palermo et al. These rejections are respectfully traversed.

Claims 1, 24 and 28 include, in combination with other claimed features, a first wire and a second wire that are joined to each other by welding. Paragraph 6 of the final Official Action characterizes the X-ray contrast material 112, 66, 81, which is formed of a coil of wire of an X-ray opaque material such as AU or PT and wound on the distal end portion of the wire A, as corresponding to the claimed first wire. The final Official Action also characterizes the wire A, 61 as corresponding to the claimed

second wire. The paragraph beginning at line 15 of column 6 of Uchino describes that the coil of X-ray contrast material 112 is wound on the distal end portion of the first wire A and buried in the coating 113. As described in the paragraph beginning at line 27 of column 12, the coil of X-ray contrast material 66 is attached to the distal end portion 61a of the first wire 61. Further, in the paragraph beginning at line 36 of column 15, Uchino describes that the coil 81 is attached to the distal end portion of the first wire 61 by way of the head piece 82 and that the proximal end of the coil 81 is fixed to the first wire 61.

Nowhere does Uchino describe that the coils of X-ray contrast material 112, 66, 81 are welded to the wire A, 61. The final Official Action states that the discussions in lines 19-67 of column 7 of Uchino and lines 16-22 of column 8 of Uchino refer to welding. However, these portions of the disclosure in Uchino discuss the connection of the wire A and the wire B. That is, those portions of the disclosure in Uchino do not state that the coil 112, 66, 81 is welded to the wire A, 61.

The Advisory Action dated October 1, 2007 states that the claim wording reciting that the first and second wires are joined by welding is a recitation of intended use or method of making. It is respectfully submitted that this is not accurate. The claimed joining of the first and second wires by welding is as much a structural aspect of the claimed subject matter as a claim recitation stating that two members are joined by a screw or bolt connection. Nevertheless, to make this point more clear, Claims 1, 24 and 28 are amended to recite that the proximal end of the first wire and the distal end of the second wire are welded to each other at a welded portion.

The Advisory Action also states that "Uchino discloses, teaches, and shows methods of making guidewires including attaching and/or joining wires together (column 7, lines 19-29, column 8, lines 16-21, column 15, lines 36-63) wherein the wires being joined or attached are said first and second wires (column 1, lines 34-39, column 6, lines 5-12, column 12 lines 26-33, column 15, lines 360-63)." However, as explained above, these noted portions of the Uchino disclosure that refer to welding describe the welded connection between wire A and the wire B. These portions of the Uchino disclosure do not describe a welded connection between the coil 112, 66, 81 (which the Official Action says corresponds to the claimed first wire) and the wire A, 61 (which the Official Action says corresponds to the claimed second wire). In addition, several of the portions of the disclosure in Uchino referenced in the Advisory Action do not even mention welding.

In the event the Examiner continues to believe the disclosure in Uchino is relevant to the independent claims here, the Examiner is kindly asked to identify the specific portion(s) of the disclosure in Uchino which states that the coil 112, 66, 81 is joined to the wire A, 61 by welding at a welded joint.

With respect to independent Claim 24, paragraph "9" of the final Official Action observes that Uchino discloses the claimed guide wire, except that it does not explicitly disclose configuring the guide wire with a spiral coil covering at least the distal end portion of the first wire, wherein the welded portion between first and second wires is located on a distal side of the proximal end of the spiral coil. However, Uchino does disclose a coil 112, 66, 81. Thus, it is not understood why another coil would be necessary or desirable for the purpose stated in the final Official Action.

In this regard, the final Official Action states that it would have been obvious to one having ordinary skill to modify the guide wire as taught by Uchino with the guide wire as taught by Palermo for the purpose of configuring the mechanical properties. Paragraph "9" of the final Official Action provides insufficient guidance on how the Examiner proposes to modify Uchino. Specifically, it is unclear which portion or element of Palermo is being adapted for use in Uchino. In other words, what is the structure of the guide wire that results from the proposed combination? If the Examiner proposes to include the inner coil 132 of Palermo in Uchino's guide wire, it is unclear how this would affect the mechanical properties such as flexibility and elastic modulus of the guide wire particularly since, as noted above, the guide wire in Uchino already includes a coil.

Figs. 5A and 5B of Palermo disclose an inner coil 132 positioned inside an outer coil 112. To the extent one of ordinary skill in the art would have had reason to utilize Palermo's disclosure of a coil 132 in Uchino's guide wire, the combination would result in Palermo's inner coil 132 placed inside Uchino's coil 112, 66, 81. Thus, the inner coil 132 would be inside the coil 112, 66, 81, the latter of which is said to correspond to the claimed first wire. Claim 24 (as well as dependent Claim 19) recite that the spiral coil covers at least the distal end portion of the first wire. Thus, the combination of Uchino and Palermo would not include a spiral coil 132 covering at least the distal end portion of the first wire 112, 66, 81, in combination with the other claimed features. Rather, the result would be just the opposite -- the coil 132 located inside the coil (first wire) 112, 66, 81.

The comments in the Advisory Action with respect to the obviousness rejection of Claim 24 still provide little clarification about how the Examiner is

modifying the guide wire disclosed in Uchino. For example, in discussing Palermo, the Examiner notes the disclosure of a spiral coil 132, and the welded connection 128. Presumably, if one applied this disclosure to the guide wire shown in Uchino, one would position Palermo's coil 132 inside the coil 112, 66, 81 in Uchino's guide wire because that is what Palermo discloses (i.e., a coil 132 inside another coil 112). However, as emphasized above, positioning Palermo's coil 132 inside the coil 112, 66, 81 in Uchino's guide wire would not result in a guide wire construction in which the coil covers at least a distal end portion of the first wire as recited in Claim 24. That is, according to the Examiner's interpretation, the coil 112, 66, 81 in Uchino corresponds to the claimed first wire. But positioning Palermo's coil 132 inside Uchino's coil 112, 66, 81 would not result in the coil 132 covering the coil 112, 66, 81.

The combination of Uchino and Palermo also would not have resulted in a guide wire with a first and second wires joined to each other by welding at a welded portion comprising a fused layer formed with the first wire and the second wire. The final Official Action characterizes the solder joint 128 in Palermo as being a welded portion between a first and a second wire. In addition, the ribbon 126 is characterized as the first wire and the middle section 106 is characterized as the second wire. Palermo's disclosure of soldering a metallic ribbon to the distal end portion of the guide wire and the surrounding coil to form a solder joint is not a disclosure of a welded portion comprising a fused layer formed by materials of the first and second wires as set forth in Claim 24.

It is thus respectfully submitted that independent claim 24 in combination with the other claim features is distinguishable over a combination of the disclosures of Uchino and Palermo.

The remaining dependent claims are allowable for at least the reasons discussed above, as well as for the individual features they recite. For example, new Claims 29 and 31 recite the first wire is a distal-most portion of the guide wire and is not a coil. This distinguishes over the coil 112, 66, 81 in Uchino which is said to correspond to the claimed first wire.

New Claim 30 recites that the spiral coil covers the welded portion and is spaced outwardly from the welded portion such as shown in Fig. 1 of the present application. In contrast, the coil 132 in Palermo is embedded in the solder joint 128.

New Claim 32 defines that at least a portion of the spiral coil is located distally beyond a distal end of the welded portion such as shown in Fig. 1 of the present application. In Palermo, at least a portion of the coil 132 is not located distally beyond the distal end of the solder joint.

New Claim 33 recites that the spiral coil possesses an axial extent greater than the axial extent of the welded portion. Once again, an example of this is shown in Fig. 1 of the present application. In Palermo, the axial extent of the coil 132 is not greater than the axial extent of the solder joint 128.

New Claim 34 sets forth that the spiral coil possesses a distal end portion, a proximal end portion and an intermediate portion, and further recites a first fixing material that fixes the intermediate portion of the spiral coil to the first wire. Fig. 1 illustrates an example of this fixing material 13. There is no disclosure of providing a fixing material between Palermo's coil 132 and Uchino's coil 112, 66, 81.

New Claim 35 depends from Claim 34 and recites a second fixing material that fixes the distal end portion of the spiral coil to the first wire. Fig. 1 illustrates an example of this fixing material 12. The combination of Palermo and Uchino does not disclose or suggest a second fixing material as claimed.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application, or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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